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ABSTRACT

Reviews of research in the area of creativity have consistently emphasized the importance of the criterion problem while simultaneously documenting its neglect by contemporary investigators. The failure to explicitly place the criterion problem within an appropriate conceptual model is perhaps a major reason for the failure to confront directly this problem on the empirical level. Notable, too, is that the focus on the criterion problem and indeed creativity research in general has ignored interpersonal considerations. The present study was undertaken to test the general hypothesis that the personal value orientation of the rater and category of behavior being rated would interact in determining judged creativity. Results indicate a significant interaction between value orientation and behavior category, clearly indicating that these two factors interact to determine judged creativity. In addition, the significant Newman-Keuls Analyses indicate the exact nature of this basic interaction: behaviors within the field of one's own value orientation are judged more creative than behaviors outside the field of one's value orientation. (Author/TA)

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Value Orientation and the Assessment of Creativity[1]

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Reviews of research in the area of creativity have consistently emphasized the importance of the criterion problem while simultaneously documenting its neglect by contemporary investigators (Brogden & Sprecher, 1964; Dellas & Gaier, 1970; Getzel & Csikszentmihali, 1968; Golann, 1963; Hood, 1968; Stein & Heinze, 1960; Yamamoto, 1965). Previously employed criteria for creativity such as generally accepted eminence (Freud, 1948; Galton, 1870; Ghiselin, 1952; May, 1959; Roe, 1951, 1953), entries in biographical dictionaries (Cattell, 1903), and explicit metaphysical analyses of ultimate criteria (Berdyaev, 1962; Ghiselin, 1952, 1963; Hood, 1968; Morgan, 1953) are no longer common based partially upon their empirical limitations and difficulties in obtaining relevant samples. Currently the most commonly employed criteria for creativity can be economically classified into three major orientations: (a) statistical definitions based largely upon deviations on paper and pencil tests (Acker & McReynolds, 1965; Barron, 1955, 1969; Flanagan, 1963; Guilford, 1967; Mednick, 1962; Torrance, 1962), (b) ratings by a variety of types of presumably qualified judges (Blatt & Stein, 1957; Drevdahl, 1956; Guilford, 1956; Harris, 1960; Holland, 1961; Jex, 1963; MacKinnon, 1961; Roe, 1951, 1953, Rossman, 1964; Torrance, DeYoung, Ghei, & Michie, 1958), and (c) the noting of behaviors and products simply assumed on the basis of face validity to require creative ability (Ghiselin, 1952; Koestler, 1964; Kubie, 1958; May, 1959; Roe, 1946a, 1946b; Wilman, 1944). Clearly no general satisfaction across investigators exists with respect to the criterion problem which recent reviewers have concluded is "far from solution" (Dellas & Gaier, 1970, p. 70). Furthermore, apparently very little research

is being done on the criterion problem as indicated by Brogden and Sprecher (1964) who could find only 14 studies directly related to the criterion problem out of an admittedly voluminous body of literature on creativity that has reached 4,176 separate titles according to one, now dated, bibliography (Razik, 1965).

The failure to explicitly place the criterion problem within an appropriate conceptual model is perhaps a major reason for the failure to directly confront this problem on the empirical level. Current theories of creativity essentially simply interpret the phenomenon of creativity within pre-established theoretical contexts such as psychoanalytic theory (Freud, 1948; Fromm, 1959; Kubie, 1958), and association theory (Mednick, 1962) or within more limited conceptual systems such as structure of the intellect model (Guilford, 1967) or dogmatism theory (Rokeach, 1965). The difficulty with the use of such systems is that they fail to confront the criterion problem directly on its own level since the criterion for creativity is either explicitly or implicitly defined within the system and thus not considered a problem meriting extensive attention by itself. The consequence is that little time and effort is devoted to the development of criteria for creativity that are employed within established theoretical systems as in fact appears to be the case as noted above.

The focus on the criterion problem and indeed creativity research in general has notably ignored interpersonal considerations. Golann's (1963) triadic classification of the literature into person, product, and process reflects this lack of interpersonal concern as does the addition of a fourth classification, environment, to the literature on creativity by Dellas and Gaier (1970). The largely intrapersonal focus in creativity research is especially unfortunate with respect to the criterion problem

since it reflects the apparent assumption that creativity is inherently an intrapersonal phenomenon to be accounted for by purely intraindividual processes. It is clear that this approach has not been particularly fruitful as far as the criterion problem is concerned. In addition it perhaps has been the most significant contributor to the common assumption that the criteria for the ascription of the label "creative" to an act must be identical across different persons and categories of acts. However, as Sprecher (1959) has emphasized, "If creativity means different things to different people, this variability should be explored before attempts to define it are undertaken (p. 141)."

Hood (1971) has argued that the criterion problem in creativity research can be fruitfully approached through an interpersonal model in which the social-psychological nature of any creativity assessment procedure can be explicitly recognized and empirically investigated. Basically, Hood's model is similar to the labeling perspective that has been employed in studies of deviance (Becker, 1963; Carey, 1968) and mental illness (Szasz, 1961, 1970) and which is ultimately rooted in the social-psychological perspective of G. H. Mead (1934). The simplest formulation of the model consists of a rater (R) who assesses an other (O) according to some standard (S). What is assessed by R may be any activity or product of O's that can be observed by R or communicated to R. The standard by which R assesses O may be either explicit or implicit and there is no necessity that R and O agree upon the appropriateness of the standard. Of most importance for the present study is that the standard by which R assesses O can be expected to reflect a basic value orientation of R with respect to O's behavior. Thus, specifically with respect to the criterion problem in creativity research the model suggests that R's assessment of O's

behavior as "creative" involves a value judgment by R with respect to O's behavior.

In a recent study Bennett, Doppelt, & Madans (1969) have shown that eminent American men from the fields of science, business, and art differentially rated various categories of behavior episodes as to their creativity. Of particular importance was their finding that creativity judgments were influenced by the interrelationship between field of interest of the rater and the area in which the behavior was manifested. This empirical finding is consistent with the purely conceptual claim of some creativity investigators that perceived value is a crucial factor in distinguishing merely original acts from creative acts (Hood, 1968; Morgan, 1953; Thomas, 1964) and in addition, is consistent with the logic of Hood's model for creativity assessment discussed above.

However, these data of Bennett, Doppelt, & Madans (1969) while suggestive of general support for the importance of perceived value in creativity judgment are far from conclusive. Several brief points can be mentioned. First, it is not necessarily the case that field of interest is equivalent to value orientation, although one suspects some overlap. Second, the data reported by Bennett et al. evidently were not subjected to statistical analyses directed toward revealing the exact nature of the interaction between field of interest of the rater and the category of behavior being rated. This is important since the data of Bennett et al. indicated that both scientists and artists judged behaviors in their own fields as more creative than behaviors outside their own fields yet this was not the case for businessmen. Third, the explicitly emphasized tentative findings of Bennett et al. are of such general interest as to warrant attempts at replication. Accordingly, the present study was

undertaken to test the general hypothesis that personal value orientation of rater and category of behavior being rated would interact in determining judged creativity. Specifically, in light of the conceptual arguments of Hood (1968), Morgan (1953), and Thomas (1964), and the empirical findings of Bennett et al. (1969) discussed above, it was predicted that raters would judge behaviors consistent with their own value orientations as more creative than behaviors less consistent with their own value orientations. Quite simply, in terms of the model discussed above, one reason R labels O's behavior "creative" is simply that he perceives it to be valuable.

METHOD

Subjects

This study was part of a larger study in which data were collected from 310 volunteer introductory psychology students. The Ss used in this study consisted of 71 Ss selected from this larger sample according to the criteria discussed below.

Procedure

The initial 310 Ss met in a group session and were administered the Allport-Vernon-Lindzey Study of Values (1960) according to standard instructions. On the basis of these scores Ss were selected for participation in this study according to the following criteria: an outstandingly high score on either aesthetic, theoretical, or economic value orientations combined with no other outstandingly high score on any of the remaining five value dimensions. In all cases outstandingly high was defined as discussed in Allport et al. (1960). On the basis of these criteria 71 Ss were identified and categorized appropriately as either aesthetic (N = 21), theoretical (N = 30) or economic (N = 20). These Ss then met in a group session and rated for their creativity on a five point scale the 48 original

behavior descriptions described in detail in Bennett, Doppelt, & Madans (1968). For the purpose of this study it is important to emphasize that these 48 behavior descriptions were written so that one-third of the items referred to scientific activities, a second third to business and finance, and the remaining third to the arts.[2]

It was assumed that the criteria used for selecting the three categories of Ss for this study would reflect value orientations relatively "purely" concerned with the appropriate behavior description category. In addition, by using only "pure" value types who were extreme on only one orientation these Ss perhaps more nearly reflect the Ss of Bennett et al. at least in terms of interest in a particular field. These behavioral episodes were presented in booklet form, one episode per page, with the order of episodes randomly determined. The instructions were identical to those described by Bennett, Doppelt, & Madans (1969, p. 42). The only apparent difference in procedure form that of Bennett et al. was that in this study the 5 point creativity rating scale was randomly counterbalanced to control for response set.

RESULTS

In order to facilitate the comparison of these data with those of Bennett, Doppelt, & Madans (1969, p. 46) the means and standard deviations of the responses per item for each behavior category for each S group are presented in table 1.[3]

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table 1 about here

The design of this experiment required Ss of three different value orientations (aesthetic, theoretical, and economic) to rate 48 behavior

descriptions that could be classified as either related to scientific activities, business and finance, or the arts. Accordingly, these data were analyzed by means of a 3 x 3 analysis of variance with repeated measures (Winer, 1962). The results of this analysis are presented in table 2.

table 2 about here

In order to further clarify the interaction between value orientation and behavior category in judged creativity the significance of the differences between all means for each value orientation were tested by means of the Newman-Keuls method (Winer, 1962). The results of these analyses indicated that for both theoretical and artistic orientations all possible differences between the three mean creativity ratings within each category were significantly different from each other ($p < .01$). For the economic orientation the mean creativity rating for the business category was significantly different ($p < .01$) from both the art and science categories. In all cases the direction of these differences are in the predicted direction as is obvious from inspection of table 1.

DISCUSSION

These data clearly support the hypothesis that raters tend to judge behaviors consistent with their own value orientations as more creative than behaviors less consistent with their own value orientations. The significant interaction between value orientation and behavior category clearly indicates that these two factors interact to determine judged creativity. In addition, the significant Newman-Keuls analyses indicate the exact nature of this basic interaction: behaviors within the field of

one's own value orientation are judged more creative than behaviors outside the field of one's value orientation. These findings are consistent with the findings of Bennett, Doppelt, & Madans (1969) indicating that scientists and artists tended to rate as more creative achievements in their own field than in other fields. Furthermore, these data indicate that the findings of Bennett et al. are not an accident peculiar to their investigation as they suggested might be the case.

The direction of the differences between means within each of the three value orientations in this study reveal some interesting differences from the data of Bennett et al. Specifically, Bennett et al. found that business items tended to be rated relatively less creative by all three groups while our data indicates no such tendency. Overall the subjects in this study tended to rate science items as relatively more creative as indicated by the significant overall main effect for factor A (behavior description categories). Considered together these two studies suggest that differences in judged creativity of the behavior description categories are not inherent in the descriptions themselves. It appears that the difference lies in the sample populations studied.

Another difference between these data and those of Bennett et al. is that in this study theoretically oriented subjects tended to be relatively most generous in attributing creativity ratings while economically oriented subjects tended to be least generous in attributing such ratings as indicated by the significant main effect for factor B (value orientation). However, Bennett et al. found that eminent businessmen were more generous than either scientists or artists in attributing creativity judgments. Again, these differences are perhaps best explained by different sample populations and are worthy of further investigation.

Finally, it might be noted that the mean creativity ratings obtained in this study for all behavior categories and value orientations appear to be significantly higher than those reported by Bennett et al. Perhaps the specific age differences and experiences of two populations studied are the explanatory factors. It seems reasonable that the greater sophistication and the older age of the population of eminent men studied by Bennett et al. would tend to make them less generous overall in assigning creativity ratings.

Overall one must not lose sight of the significant congruence between these data and those of Bennett et al. offering remarkable support for the hypothesis that creativity ratings depend upon the interaction between the value orientation of the rater and the nature of the act to be rated. Specifically, acts consistent with one's value orientation are judged as relatively more creative than acts less consistent with one's value orientation. This clearly is the case for both this study and the study of Bennett et al. even though significantly different populations were studied and different operational measures of value orientation were employed. The only difference relative to this general hypothesis between the findings of this study and those of Bennett et al. is that in this study the hypothesis was consistent for all three value orientations while in the Bennett et al. study the hypothesis was consistent for only the science and art orientations. Thus, this study can be considered to offer more consistent support for the hypothesis than does the study of Bennett et al. considered alone.[4]

The fact that creativity ratings depend upon the interaction between value orientation of the rater and the area in which the behavior is manifested is consistent with purely conceptual arguments regarding the

nature of creativity (Hood, 1968; Morgan, 1953; Thomas, 1964). In addition, these data suggest that investigators such as McPherson (1963), Sprecher (1959), and Thorndike (1963) are correct in emphasizing that the criteria for describing a given action as creative are ultimately human decisions and as such need not be identical across all persons. Specifically, in terms of Hood's model, R's evaluations are necessarily involved in any standard used to assess O's actions. The mere fact that this standard rather than that standard is used by R is ipso facto evidence for the presence of R's evaluations. The relative degree of "subjectivity" of the standard actually used by R is a rather mute question for the psychologist qua psychologist. Even a rigidly operationally defined standard to which O's actions can be empirically demonstrated to correspond is itself merely reflexively described in terms of the model as reflecting R's own value orientation to use this particular standard. Thus, at least in this sense, creativity may indeed be in the eye of the beholder. However, such a conclusion does not necessarily warrant the assertion that creativity is a concept with no unitary meaning. Such a conclusion confuses the meaning of a concept with the criteria for its application (Harre', 1964). For instance, it may be the case that creativity is a concept that essentially has a unitary meaning, that of valued originality, as Hood (1968); Morgan (1963); and Thomas (1964) have argued. However, this core meaning even if consistent across various persons may require different criteria for its application depending upon the nature of the value orientation of the persons in question. As such one must not expect to resolve the criterion problem in creativity by a single set of universally agreed upon criteria even if persons can agree upon a unitary meaning for the concept of creativity. For instance, even among raters who agree that creativity

necessarily means valued originality, disagreements can arise as to what criteria qualify an original act as valuable. Thus, perhaps it would be more fruitful to focus current research upon the empirical identification of the variety of actual criteria employed by different categories of persons when they evaluate a given act as creative. The value of an interpersonal model such as Hood's is that it forces research to consider the interactions between the person rated (O) and the person doing the rating (R) in terms of whatever value standard is employed (S).[5] Such research may provide progress toward resolving the criterion problem in creativity research by reformulating the nature of the inquiry.

Table 1

Means and Standard Deviations of Creativity Ratings

Subject Value Orientation	N		Science Incidents	Business Incidents	Art Incidents
Theoretical	30	MEAN	2.22	2.10	1.98
		S.D.	.61	.63	.73
Economic	20	MEAN	2.14	2.17	2.14
		S.D.	.61	.93	.61
Aesthetic	21	MEAN	2.11	2.01	2.17
		S.D.	.67	.55	.61

Table 2
Summary of Analysis of Variance

Source	SS	df	MS	F	p
Between Ss					
Behavior Description Category (A)	1.83	2	0.92	3.12	$< .05$
Ss within groups	19.91	68	0.29		
Within Ss					
Value Orientation (B)	5.95	2	2.98	18.62	$< .01$
Interaction (A x B)	16.48	4	4.12	25.75	$< .01$
B x Ss within groups	21.70	136	0.16		

Footnotes

1. Portions of this research were supported by a grant from the University of Tennessee at Chattanooga.
2. These 48 behavioral descriptions differ in other dimensions besides content area as discussed by Bennett, Doppelt, & Madans (1969, p.42). However, for purposes of this study these other dimensions were ignored. It is important to emphasize that these additional dimensional differences are essentially distributed across content area so as to have no systematic influence on the hypothesis tested in this study.
3. F max tests indicated no significant differences among any of these variances.
4. It is important methodologically to note that since one can expect value orientation to be directly related to frequency (Postman & Schneider, 1951) and since frequency is a criteria inversely related to originality (usually by definition), persons of a given value orientation would be less likely to see an action within their particular field as original and thus less likely to judge it to be creative. Thus, the actual design of this experiment was most conservative in that it was strongly biased against demonstrating any relationship between value orientation and judged creativity due to the inverse relationship between originality and frequency. This, of course, assumes that originality is one factor in creativity assessment--a point hardly in contention.
5. Of course, the standard by which R assesses O need not be unidimensional. In particular, with respect to creativity assessment two factors appear to be crucial--perceived value and perceived originality. The exact nature of the interaction of these two factors as a standard by which creativity is assessed is yet to be empirically determined.

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